

MACMAT[®] R1 8127G0
STEEL REINFORCED GEOMAT

MacMat[®] R is a reinforced geomat made from a polymeric three-dimensional matrix extruded onto a double twisted steel wire woven mesh 8x10 type made of Galmac[®] (a Zn/Al5% alloy) and polymer coated wire. Units are produced in compliance with CPR - Construction Product Regulation 305/2011 and EN 10223-3.

MacMat [®] R			R1 8127G0	Notes
Geomat properties				
Polymer			Polypropylene	
Mass per unit area	EN ISO 9864	g/m ²	450 (±30)	1
Melting point	ISO 11357-3	°C	160	2
Density	ISO 1183	kg/m ³	900	2
UV resistance			Stabilized	
Reinforcement properties				
Type	EN 10244-2 EN 10245-1	Double twisted woven steel wire mesh GalMac [®] and polymer coated		
Mesh type	EN 10223-3		8x10	
Wire diameter (int. / ext.)	EN 10223-3	mm	2.70 / 3.70	
Galmac coating	EN 10244-2	kN/m	Class A	
Nominal mesh tensile strength	EN 10223-3	kN/m	50	
Nominal Punching Load	UNI 14437	kN	65	
Composite Physical Properties				
Mass per unit area	EN ISO 9864	g/m ²	2130 (±213)	1
Voids index		%	> 90	1
Thickness at 2 kPa	EN ISO 9863-1	mm	16 (±4)	3
Roll width		m	2.00	4
Roll length		m	25	5
Composite Erosion Control Properties				
Light Penetration (passing)	ASTM D6567	%	35 - 45	
Ground Coverage		%	55 - 65	
C factor (cover management factor): - rainfall intensity i = 50 mm/h - rainfall intensity i = 100 mm/h - rainfall intensity i = 150 mm/h	ASTM D6459		≤ 0.0028 ≤ 0.012 ≤ 0.032	6
Environmental and Sustainability Properties				
Content of SVHC		%	≤ 0.1	7
Global Warming Potential Total (GWP)		kg CO ₂ Eq.	≤ 3.66E+00	
Acidification potential (AP)	ISO 14025 EN 15804	mol H ⁺ Eq.	≤ 1.19E-02	
Eutrophication Potential freshwater (EP-fr)		kg P Eq.	≤ 9.14E-06	
Eutrophication Potential marine (EP-mar)		kg N Eq.	≤ 4.02E-03	
Eutrophication Potential terrestrial (EP-ter)		mol N Eq.	≤ 4.34E-02	



- (1) Nominal value, where no specific tolerance is indicated a standard of 10% is admissible;
- (2) Informative value given at the best of our knowledge;
- (3) Typical value, however the geocomposite thickness can vary according to specific project requirements ranging from 8 to 22 mm approx.;
- (4) A standard tolerance of 5% is admissible with reference to the declared value;
- (5) A standard tolerance of 1% is admissible with reference to the declared value;
- (6) Calculated values certified by a CPESC (certified professional soil erosion & sediment control specialist) based on full scale test reports 732 and 734 run according to ASTM D6459 - Standard Test Method for Determination of Erosion Control Blanket (ECB) Performance in Protecting Hillslopes from Rainfall-Induced Erosion;
- (7) Values reported in the EPD certificate KIWA-EE- 000380-EN issued in accordance with EN15804+A2: 2019 and ISO14025 with validity till April 2029. The reported values are selected among the 13 mandatory certified values (EN 15804+A2:2019) and referred to the Product Stage A1-A3. Additional environmental impact indicators and different Product Stages valid for Life Cycle Assessment are reported in the full EPD certificate of the product.

The standard colour of the geomat is black. Brown colour is available in request.



For the optimisation and improvement process of the technical characteristics of the products, the producer reserves the right to modify standards and characteristics of the product without warning. The information contained herein is to the best of our knowledge accurate, but since the circumstances and conditions in which it may be used are beyond our control, we do not accept any liability for any loss or damage, however arising, which results directly or indirectly from the use of such information nor do we offer any warranty or immunity against patent infringement. Specifiers are requested to check the validity of the specification they are using.

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